

1. A temperature probe comprising:  
  
a temperature sensor that provides a resistive output,  
a logic circuit for determining a modified resistive output for the temperature sensor, and  
a means for providing the modified resistive output.
2. The temperature probe of claim 1 wherein the logic circuit is programmed to execute a predictive or a correlative algorithm.
3. The temperature probe of claim 2 wherein the logic circuit is a microprocessor.
4. The temperature probe of claim 3 wherein the means for providing the modified resistive output is a potentiometer and the logic circuit sends a control signal to the potentiometer such that the potentiometer provides the modified resistive output.
5. The temperature probe of claim 3 wherein the means for providing the modified resistive output includes a FET.
6. The temperature probe of claim 3 wherein the means for providing the modified resistive output includes a photocell and a LED.
7. The temperature probe of claim 4 wherein the probe includes two potentiometers.
8. A monitor interface for a temperature probe comprising:  
  
a logic circuit for determining a modified resistive output for the temperature sensor and  
a means for providing the modified resistive output.
9. The interface of claim 8 wherein the logic circuit is programmed to execute a predictive or a correlative algorithm.
10. The interface of claim 9 wherein the logic circuit is a microprocessor.
11. The interface of claim 8 wherein the means for providing the modified resistive output is a potentiometer and the logic circuit sends a control signal to the potentiometer such that the potentiometer provides the modified resistive output.

12. The interface of claim 11 wherein the probe includes two potentiometers.
13. The interface of claim 8 wherein the means for providing the modified resistive output includes a FET.
14. The interface of claim 8 wherein the means for providing the modified resistive output includes a photocell and an LED.
15. The interface of claim 8 wherein the means for providing the modified resistive output is a means for providing a modified resistive output is compatible with the monitor such that the monitor can display a temperature that corresponds to the modified resistive output from the temperature probe.
16. A temperature probe comprising:
  - a temperature sensor having a resistive output,
  - a processor for determining a modified resistive output for the temperature sensor, the processor being programmed to execute a predictive or a correlative algorithm, and
  - a potentiometer for providing the modified resistive output in response to a signal from the processor.
17. The temperature probe of claim 16 wherein the processor executes an algorithm to convert the resistive output of the temperature sensor to a modified resistive output that can be displayed by a monitor.
18. The temperature probe of claim 16 wherein the algorithm is a predictive algorithm that converts the resistive output of the temperature sensor during a thermally unstable condition to a modified resistive output representative of a predicted temperature during a condition of thermal stability.
19. The temperature probe of claim 16 wherein the probe includes two potentiometers.
20. An interface for converting the resistive output of a temperature sensor to a modified resistive output for display on a monitor comprising:
  - a logic circuit,

an input to the logic circuit from a temperature sensor,  
an output from the logic circuit,  
the logic circuit being programmed to execute a predictive or a correlative algorithm, and  
a means for providing a resistance corresponding to the predicted or correlated output.

21. The interface of claim 20 wherein the resistive output from the temperature sensor is input to an analog to digital converter and the output from the analog to digital converter is fed to the logic circuit.

22. The interface of claim 20 wherein the logic circuit is a microprocessor.

23. The interface of claim 20 wherein the means for providing the resistance is a digital potentiometer and the microprocessor signals the potentiometer to assume a setting corresponding to the predicted output.

24. The interface of claim 23 wherein the interface includes two potentiometers.

25. A method for digitally modifying the resistive output of a temperature sensor which comprised inputting the resistive output from the temperature sensor to a logic circuit, implementing a predictive or a correlative algorithm using the logic circuit to determine a modified resistive output, signaling a potentiometer to adopt a setting corresponding to the modified resistive output, and outputting a resistance corresponding to the modified resistive output.